



\*\*FILE\*\*ID\*\*CLUMBX

J 1

CL

en

/\*  
CLI

en

/\*  
/\*  
/\*

LKI

E

CCCCCCCC	LL	UU	UU	MM	MM	BBBBBBBB	XX	XX
CCCCCCCC	LL	UU	UU	MM	MM	BBBBBBBB	XX	XX
CC	LL	UU	UU	MMMM	MMMM	BB	BB	XX
CC	LL	UU	UU	MMMM	MMMM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CC	LL	UU	UU	MM	MM	BB	BB	XX
CCCCCCCC	LLLLLLLL	UUUUUUUU	UUUUUUUU	MM	MM	BBBBBBBB	XX	XX
CCCCCCCC	LLLLLLLL	UUUUUUUU	UUUUUUUU	MM	MM	BBBBBBBB	XX	XX

SSSSSSSS	DDDDDDDD	LL
SSSSSSSS	DDDDDDDD	LL
SS	DD	DD
SSSSSS	DD	DD
SSSSSS	DD	DD
SS	DD	DD
SSSSSS	DDDDDDDD	LLLLLLLL
SSSSSS	DDDDDDDD	LLLLLLLL

CLUMBX.SDL

Version: 'V04-000'

\*\*\*\*\*  
\* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
\* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.  
\* ALL RIGHTS RESERVED.

\*\* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED  
\*\* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE  
\*\* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER  
\*\* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY  
\*\* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY  
\*\* TRANSFERRED.

\*\* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE  
\*\* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT  
\*\* CORPORATION.

\*\* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS  
\*\* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

\*\*

FACILITY: SYSLOAD - System loadable code

ABSTRACT:

This file contains the SDL source for the definition of the cluster  
state change messages sent to OPROM.

ENVIRONMENT:

n/a

--

AUTHOR: Dave Thiel CREATION DATE: 24-Aug-1983

MODIFIED BY:

V03-002 DWT0213 David W. Thiel 07-Apr-1984  
Add ST\_COMPLETE and ST\_QUORUM subtype codes.  
Mark ST\_FORM and ST\_RECNFIG subtype codes obsolete.

V03-001 DWT0129 David W. Thiel 8-Sep-1983  
Add ST\_NOQUORUM and ST\_FORNDISK subtype codes.

```
module $CLUMBXDEF;
/*+
 * CLUMBX - CLUSTER STATE CHANGE MAILBOX MESSAGE
 *
 * THIS DEFINES THE FORMAT OF A CLUSTER STATE CHANGE MESSAGE
 * WHICH IS SENT TO THE OPCOM MAILBOX
*/-
```

```
aggregate CLUMBXDEF structure prefix CLUMBX$;
```

```
MSGTYPE word unsigned;           /* MESSAGE ID (MSG$_CLUMBX)
SUBTYPE word unsigned;          /* MESSAGE SUB-TYPE
constant (                      /* DEFINE CLUSTER MESSAGE SUB-TYPES
    ST_NEWSYS,                  /* DISCOVERED NEW SYSTEM
    ST_CNX,                      /* CONNECTED TO SYSTEM
    ST_RECNX,                    /* RECONNECTED TO SYSTEM
    ST_LOSTCNX,                  /* LOST CONNECTION TO SYSTEM
    ST_TIMCNX,                  /* TIMED-OUT BROKEN CONNECTION
    ST_INIFORM,                  /* INITIATING CLUSTER FORMATION
    ST_INIADD,                   /* INITIATING NODE ADDITION
    ST_INIRECFG,                 /* INITIATING CLUSTER RECONFIGURATION
    ST_MEMREQ,                   /* REQUESTING CLUSTER MEMBERSHIP
    ST_ABORT,                    /* ABORTING CLUSTER STATE TRANSITION
    ST_FORM,                     /* NEW CLUSTER FORMED (OBSOLETE)
    ST_ADD,                      /* NODE ADDED TO CLUSTER
    ST_RECFIG,                   /* CLUSTER RECONFIGURED (OBSOLETE)
    ST_NEWWNODE,                 /* MEMBER OF NEW CLUSTER
    ST_DROPNODE,                 /* NODE REMOVED FROM CLUSTER
    ST_FORNCLUS,                 /* FOREIGN CLUSTER SEEN
    ST_INQUORUM,                 /* QUORUM REGAINED
    ST_LOSTDISK,                  /* CONNECTION TO QUORUM DISK LOST
    ST_GAINDISK,                  /* CONNECTION TO QUORUM DISK GAINED
    ST_DISKREERR,                 /* ERROR READING QUORUM DISK
    ST_DISKWRERR,                 /* ERROR WRITING QUORUM DISK
    ST_DISKINVDAT,                /* INVALID DATA READ FROM QUORUM DISK
    ST_DISKTIMEOUT,                /* OPERATION TO QUORUM DISK TIMED-OUT
    ST_LOSTMSG,                   /* MESSAGES LOST
    ST_NOQUORUM,                  /* QUORUM LOST
    ST_FORNDISK,                  /* FOREIGN CLUSTER SEEN VIA QUORUM DISK
    ST_COMPLETE,                  /* CLUSTER STATE TRANSITION COMPLETE
    ST_QUORUM)                   /* PROPOSED CHANGE OF QUORUM OR DISK MEMBERSHIP
) equals 1 increment 1;
DS_VERSION byte unsigned;        /* VERSION OF DATA STRUCTURE
constant DS_VERSION equals 1
FLAGS structure byte unsigned;   /* CURRENT DATA STRUCTURE VERSION
    BRDCST bitfield mask;        /* FLAG BITS
end FLAGS;
LENGTH word unsigned;            /* TOTAL MESSAGE LENGTH
CSIDL_L longword unsigned;       /* LOCAL NODE CLUSTER SYSTEM ID
SYSTEMID_L byte dimension 6;     /* LOCAL NODE SYSTEM ID
FILL_1 word unsigned fill;       /* PAD TO LONGWORD BOUNDARY
NODENAME_L character length 16;  /* LOCAL NODE NAME
CSIDL_R longword unsigned;       /* REMOTE NODE CLUSTER SYSTEM ID
SYSTEMID_R byte dimension 6;     /* REMOTE NODE SYSTEM ID
FILL_2 word unsigned fill;       /* PAD TO LONGWORD BOUNDARY
NODENAME_R character length 16;  /* REMOTE NODE NAME
```

```
TIME quadword;
constant "LENGTH" equals .;
end CLUMBXDEF;
/* TIME-STAMP
/* LENGTH OF MESSAGE
END_MODULE $CLUMBXDEF;
```

0391 AH-BT13A-SE  
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION  
CONFIDENTIAL AND PROPRIETARY

ADPSUB780  
LIS

ACKMSG  
LIS

MCF790  
SOL

MCDEF  
MOL

ADPERR250  
LIS

ADPSUB730  
LIS

CSPODEF  
SOL

CLUMBX  
SOL

ADPERR780  
LIS

ADPSUB750  
LIS

CLUSTMAC  
MAR

CLUSTER  
SOL